

April 16, 2007

Garrett A. Stone, Esquire Brickfield, Burchette and Ritts, P.C. 1025 Thomas Jefferson Street, NW 8th Floor, West Tower Washington, D.C. 20007

Re:

SCPSC Docket No. 2007-1-E

Dear Garrett:

Pursuant to the December 21, 1998 agreement entered into by and between Progress Energy Carolinas, Inc. and Nucor in Docket 1999-029-E, enclosed is documentation required by paragraph 1 of that agreement regarding PEC's actual system nuclear capacity factor calculation. As you can see, PEC met the 92.5% goal.

Sincerely,

Len S. Anthony

Deputy General Counsel - Regulatory Affairs

LSA:mhm

Enclosure

cc:

Charles Terreni (w/enc.)

248211

Raleigh, NC 27602

Report to NUCOR STEEL CORPORATION

Of

CP&L Nuclear System Capacity Factor

Pursuant to SCPSC Docket 1999-029-E

Test Period April 1, 2006 Through March 31, 2007

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CP&L Nuclear Capacity Factor Calculation (Unadjusted) April 1, 2006 – March 31, 2007

Net Electrical Generation during the Test Period April 1, 2006 to March 31, 2007 Reported to the NRC and available in the NRC's Public Documents Collection

	MWhs
Brunswick Unit 1	7,882,057
Brunswick Unit 2	6,695,352
Harris Unit 1	7,027,396
Robinson Unit 2	6,428,753
A – Total Net Generation	28,033,558

Unit Maximum Dependable Capacity (MW)
Reported to the NRC and available in the NRC's Public Documents Collection

	MDC (MW)
Brunswick Unit 1	938
Brunswick Unit 2	937
Harris Unit 1	900
Robinson Unit 2	710
B – Max Dependable Capacity	3,485

Period Hours in the Test Period April 1, 2006 to March 31, 2007

C – Period Hours during test period	8,759

Capacity Factor Formula

 $[(A)/(B \times C)] = 91.8\%$

CP&L Nuclear Capacity Factor Calculation Adjusted for Refueling Outages Only and Steam Generator Replacement Outages of 100 Days or Less April 1, 2006 – March 31, 2007

Net Electrical Generation during the Test Period April 1, 2006 to March 31, 2007 Reported to the NRC and available in the NRC's Public Documents Collection

	MWhs
Brunswick Unit 1	7,882,057
Brunswick Unit 2	6,695,352
Harris Unit 1	7,027,396
Robinson Unit 2	6,428,753
Total Net Generation	28,033,558

Refueling outages of 40 days or less and steam generator replacement outages of 100 days or less

	MWh Losses
Brunswick Unit 1	160,194
Brunswick Unit 2	651,137
Harris Unit 1	829,590
Robinson Unit 2	Ó
Total	1,640,921

A – Total Test Period Net Generation + Adjustment for refueling	00.074.470
outages & steam generator replacement outages	29,674,479

Unit Maximum Dependable Capacity (MW)
Reported to the NRC and available in the NRC's Public Documents Collection

	MDC (MW)
Brunswick Unit 1	938
Brunswick Unit 2	937
Harris Unit 1	900
Robinson Unit 2	710
B – Max Dependable Capacity	3,485

Period Hours in the Test Period April 1, 2006 to March 31, 2007

C – Period Hours during test period 8,759	C – Period Hours during test period	8,759
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Capacity Factor Formula

 $[(A)/(B \times C)] = 97.2\%$

Amended SC Fuel Rule Related to Nuclear Operations

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation system if the utility achieved a net capacity factor $\geq 92.5\%$ during the 12 month period under review. For the test period April 1, 2006 through March 31, 2007, actual period to date performance is summarized below.

Period to Date: April 1, 2006 through March 31, 2007

Nuclear System Capacity Factor Calculation (Based on net generation)

A.	Nuclear system actual generation for SCPSC test period	A = 28,033,058 MWH
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B. Total number of hours during SCPSC test period B = 8,759 Hrs.

C. Nuclear system MDC during SCPSC test period (see page 2) C = 3,485 MW

D. Reasonable nuclear system reductions (see page 2) D = 3,043,133 MWH

E. SC Fuel Case nuclear system capacity factor: [(A+D)/(B*C)]*100 = 101.8%

NOTE:

If Line Item $E \ge 92.5\%$, presumption of utility's minimum cost operation If Line Item E < 92.5%, utility has burden of proof of reasonable operations

Amended SC Fuel Rule
Nuclear System Capacity Factor Calculation
Reasonable Nuclear System Reductions
Period to Date: <u>April 1, 2006</u> to <u>March 31, 2007</u>

Nicclear Unit Name and Decionation	BNP	BNP Unit	HNP Unit	RNP Unit #	Nuclear
	Onit # 1	7#	# 1	781012	2 485 MW
Unit MDC	958 MW	957 MW	900 M W	/ 10 IM W	3,485 M W
Reasonable refueling outage time (MWH)	160,194	651,137	829,590	0	
Reasonable maintenance, repair, and equipment replacement outage time (MWH)	316,218	772,939	80,268	45,402	
Reasonable coast down power reductions (MWH)	2,692	8,652	0	4,383	
Reasonable power ascension power reductions (MWH)	24,530	84,173	4,019	3,791	
Prudent NRC required testing outages (MWH)	20,107	27,436	445	6,384	
SCPSC identified outages not directly under utility control (MWH)	0	0	0	0	
Acts of Nature reductions (MWH)	0	0	0	774	
Reasonable nuclear reduction due to low system load (MWH)	0	0	0	0	
Unit total excluded MWH	523,741	1,544,337	914,322	60,734	
Total reasonable outage time exclusions [carry to Page 1, Line D]					3,043,133

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ATTACHMENT A

Recorded Generation and Capacity Factors (Test Period April 1, 2006 - March 31, 2007) Monthly Generation

		wonthly G	eneration			
Month:	" BNP1 - "	BNP 2.	BNP*4	HNP	RNP	Carolina Fleet
April 2006	502,051	675,191	1,177,242	144,735	524,009	1,845,986
May 2006	721,249	438,808	1,160,057	256,719	550,676	1,967,452
June 2006	667,601	667,959	1,335,560	651,468	525,071	2,512,099
July 2006	713,467	696,644	1,410,111	665,897	538,030	2,614,038
August 2006	382,134	693,383	1,075,517	665,520	535,996	2,277,033
September 2006	677,115	642,823	1,319,938	588,819	525,620	2,434,377
October 2006	721,677	698,175	1,419,852	689,625	507,454	2,616,931
November 2006	685,785	252,407	938,192	669,468	541,935	2,149,595
December 2006	719,217	559,328	1,278,545	692,047	562,380	2,532,972
January 2007	717,820	697,731	1,415,551	691,771	560,132	2,667,454
February 2007	654,219	636,309	1,290,528	626,054	508,107	2,424,689
March 2007	719,722	36,594	756,316	685,273	549,343	1,990,932
TOTAL	7,882,057	6,695,352	14,577,409	7,027,396	6,428,753	28,033,558

	Monthly Capacity Factor (Unadjusted)									
	BNP 1	BNP 2	BNP	HNP	RNP	Carolina Fleet				
MDC	938	* 937	1,875	900	710	3,485				
April 2006	74.4%	100.2%	87.3%	22.4%	102.6%	73.7%				
May 2006	103.3%	62.9%	83.2%	38.3%	104.2%	75.9%				
June 2006	98.9%	99.0%	98.9%	100.5%	102.7%	100.1%				
July 2006	102.2%	99.9%	101.1%	99.4%	101.9%	100.8%				
August 2006	54.8%	99.5%	77.1%	99.4%	101.5%	87.8%				
September 2006	100.3%	95.3%	97.8%	90.9%	102.8%	97.0%				
October 2006	103.3%	100.0%	101.6%	102.9%	95.9%	100.8%				
November 2006	101.5%	37.4%	69.5%	103.3%	106.0%	85.7%				
December 2006	103.1%	80.2%	91.7%	103.4%	106.5%	97.7%				
January 2007	102.9%	100.1%	101.5%	103.3%	106.0%	102.9%				
February 2007	103.8%	101.1%	102.4%	103.5%	106.5%	103.5%				
March 2007	103.3%	5.3%	54.3%	102.5%	104.1%	76.9%				
TOTAL	95.9%	81.6%	88.8%	89.1%	103.4%	91.8%				

	Year to Date Generation (Unadjusted)								
	BNP1	BNP 2	BNP *	HNP II	RNP	Carolina Fleet			
April 2006	502,051	675,191	1,177,242	144,735	524,009	1,845,986			
May 2006	1,223,300	1,113,999	2,337,299	401,454	1,074,685	3,813,438			
June 2006	1,890,901	1,781,958	3,672,859	1,052,922	1,599,756	6,325,537			
July 2006	2,604,368	2,478,602	5,082,970	1,718,819	2,137,786	8,939,575			
August 2006	2,986,502	3,171,985	6,158,487	2,384,339	2,673,782	11,216,608			
September 2006	3,663,617	3,814,808	7,478,425	2,973,158	3,199,402	13,650,985			
October 2006	4,385,294	4,512,983	8,898,277	3,662,783	3,706,856	16,267,916			
November 2006	5,071,079	4,765,390	9,836,469	4,332,251	4,248,791	18,417,511			
December 2006	5,790,296	5,324,718	11,115,014	5,024,298	4,811,171	20,950,483			
January 2007	6,508,116	6,022,449	12,530,565	5,716,069	5,371,303	23,617,937			
February 2007	7,162,335	6,658,758	13,821,093	6,342,123	5,879,410	26,042,626			
March 2007	7,882,057	6,695,352	14,577,409	7,027,396	6,428,753	28,033,558			

	Year to Date Capacity Factor (Unadjusted)									
	BNP.1	BNP.2	BNP	HNP	RNP	Carolina Fleet				
April 2006	74.4%	100.2%	87.3%	22.4%	102.6%	73.7%				
May 2006	89.1%	81.3%	85.2%	30.5%	103.5%	74.8%				
June 2006	92.3%	87.1%	89.7%	53.6%	103.2%	83.1%				
July 2006	94.9%	90.4%	92.6%	65.2%	102.9%	87.6%				
August 2006	86.7%	92.2%	89.5%	72.2%	102.6%	87.7%				
September 2006	88.9%	92.7%	90.8%	75.2%	102.6%	89.2%				
October 2006	91.0%	93.8%	92.4%	79.2%	101.7%	90.9%				
November 2006	92.3%	86.8%	89.6%	82.2%	102.2%	90.2%				
December 2006	93.5%	86.1%	89.8%	84.6%	102.7%	91.1%				
January 2007	94.5%	87.5%	91.0%	86.5%	103.0%	92.3%				
February 2007	95.3%	88.7%	92.0%	87.9%	103.3%	93.2%				
March 2007	95.9%	81.6%	88.8%	89.1%	103.4%	91.8%				

ATTACHMENT B

Brunswick Unit 1 April 1, 2006 - March 31, 2007 Test Period MWh Losses by Cause

	Refuel	Repairs	Coastdowns	Power Ascension	Testing	SCPSC	Acts of Nature	Low Load	Total
Apr-06	160,194	402	0	0	0	0	0	0	160,597
May-06	0	334	0	0	0	0	0	0	334
Jun-06	0	2,901	0	5,276	5,343	0	0	0	13,520
Jul-06	0	0	0	0	6	0	0	0	6
Aug-06	0	295,819	2,692	17,867	0	0	0	0	316,378
Sep-06	0	14,849	0	0	171	0	0	0	15,020
Oct-06	0	24	0	0	0	0	0	0	24
Nov-06	0	1,787	0	1,386	8,324	0	0	0	11,497
Dec-06	0	0	0	0	1,475	0	0	0	1,475
Jan-07	0	100	0	0	2,906	0	0	0	3,006
Feb-07	0	0	0	0	8	0	0	0	8
Mar-07	0	0	0	0	1,876	0	0	0	1.876
Total	160,194	316,218	2,692	24,530	20,107	0	0	0	523,741

Brunswick Unit 2 April 1, 2006 - March 31, 2007 Test Period MWh Losses by Cause

	Refuel	Repairs	Coastdowns	Power Ascension	Testing	SCPSC	Acts of Nature	Low Load	Total
Apr-06	0	0	0	0	4	0	0	0	4
May-06	0	231,001	3,591	27,327	7	0	0	0	261,926
Jun-06	0	474	0	7,737	8	0	0	0	8,219
Jul-06	0	0	0	0	56	0	0	0	56
Aug-06	0	1,492	0	0	0	0	0	0	1,492
Sep-06	0	8,439	0	4,810	19,774	0	0	0	33,022
Oct-06	0	587	0	0	7,429	0	0	0	8.016
Nov-06	0	391,570	0	30,868	0	0	0	ŏ	422,438
Dec-06	0	131,589	0	13,432	10	0	0	0	145,031
Jan-07	0	7,787	0	0	0	0	0	0	7,787
Feb-07	0	0	83	0	148	0	0	ō	231
Mar-07	651,137	0	4,978	0	0	0	0	0	656,115
Total	651,137	772,939	8,652	84,173	27,436	ō	0	0	1,544,337

Harris Unit 1 April 1, 2006 – March 31, 2007 Test Period MWh Losses by Cause

	Refuel	Repairs	Coastdowns	Power Ascension	Testing	SCPSC	Acts of Nature	Low Load	Total
Apr-06	496,815	0	0	0	0	0	0	0	496,815
May-06	332,775	22,185	0	0	0	0	0	0	354,960
Jun-06	0	0	0	0	0	0	0	0	0
Jul-06	0	0	0	0	36	0	0	0	36
Aug-06	0	33	0	0	0	0	0	0	33
Sep-06	0	57,465	0	4,019	0	0	0	0	61,484
Oct-06	0	0	0	0	0	0	0	0	0
Nov-06	0	191	0	0	0	0	0	0	191
Dec-06	0	394	0	0	0	0	0	0	394
Jan-07	0	0	0	0	0	0	0	0	0
Feb-07	0	0	0	0	0	0	0	0	0
Mar-07	0	0	0	0	409	0	0	0	409
Total	829,590	80,268	0	4,019	445	0	0	0	914,322

Robinson Unit 2 April 1, 2006 – March 31, 2007 Test Period MWh Losses by Cause

	Refuel	Repairs	Coastdowns	Power Ascension	Testing	SCPSC	Acts of Nature	Low Load	Total
Apr-06	0	6,384	0	0	6,384	0	0	0	12,767
May-06	0	0	0	0	0	0	0	0	0
Jun-06	0	0	0	0	0	0	0	0	0
Jul-06	0	0	0	0	0	0	0	0	0
Aug-06	0	0	0	0	0	0	774	0	774
Sep-06	0	0	0	0	0	0	0	0	0
Oct-06	0	39,018	0	3,791	0	0	0	0	42,809
Nov-06	0	0	0	0	0	0	0	0	0
Dec-06	0	0	0	0	0	0	0	0	0
Jan-07	0	0	0	0	0	0	0	0	0
Feb-07	0	0	0	0	0	0	0	0	0
Mar-07	0	0	4,383	0	0	0	0	0	4,383
Total	0	45,402	4,383	3,791	6,384	0	774	0	60,734

PEC Nuclear System Total April 1, 2006 – March 31, 2007 Test Period MWh Losses by Cause

	Refuel	Repairs	Coastdowns	Power Ascension	Testing	SCPSC	Acts of Nature	Low Load	Total
Apr-06	657,010	6,786	0	0	6,387	0	0	0	670,183
May-06	332,775	253,520	3,591	27,327	7	0	Ö	0	617,220
Jun-06	0	3,375	0	13,013	5.351	0	0	0	21,740
Jul-06	0	0	0	0	98	0	0	0	98
Aug-06	0	297,344	2,692	17.867	0	0	774	0	318,677
Sep-06	0	80,753	0	8,828	19.944	0	0	0	109.525
Oct-06	0	39,630	0	3,791	7,429	0	0	0	50.850
Nov-06	0	393,548	0	32,254	8,324	0	0	0	434.126
Dec-06	0	131,983	0	13,432	1,485	0	0	0	146.899
Jan-07	0	7,887	0	0	2,906	0	0	0	, , , , , , , , , , , , , , , , , , , ,
Feb-07	0	0	83	0	156	0	0	0	10,793
Mar-07	651,137	0	9,361	0	2,285	0	0	0	239
Total	1,640,922	1,214,827	15,727	116,512	54,372	0	774	0	662,783 3,043,133